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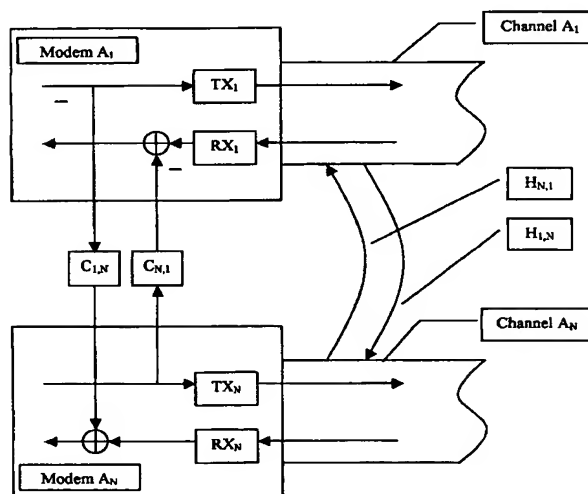
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(54) Title: **HITLESS MODEM POOL EXPANSION AT STEADY STATE**



(57) Abstract: In a communications system having a first modem transmitting via a communications channel, a method for adding a second modem, the method including learning crosstalk caused by transmissions from the first modem to the second modem while the second modem is in a transmitting state insufficient to cause crosstalk interference to the first modem in accordance with a predefined measure, deriving from the learned crosstalk an estimation of crosstalk that would be caused by the second modem to the first modem when the second modem is in a transmitting state, configuring the first modem to cancel crosstalk according to the crosstalk estimation, causing the second modem to enter a transmitting state sufficient to cause crosstalk interference to the first modem in accordance with a predefined measure, and causing the first modem to at least partially cancel crosstalk caused by the second modem in accordance with the crosstalk estimation.